WUNDERLICH
ARCHITECTURAL
TERRA COTTA

TERRA COTTA FACADES
BULLETIN T.C.3

WUNDERLICH ARCHITECTURAL TERRA COTTA

". . . it is not the material, but the absence of the human labour, which makes the thing worthless; and a piece of terra cotta . . . which has been wrought by the human hand, is worth all the stone in Carrara, cut by machinery"

"The Seven Lamps of Architecture" (John Ruskin)

Terra Cotta Facades
Bulletin T.C.3

WUNDERLICH LIMITED

HEAD OFFICE: . . . . . Corner of Baptist and Cleveland Streets, REDFERN, SYDNEY

ARCHITECTURAL TERRA COTTA WORKS: ROSEHILL (Sydney), and SUNSHINE (Melbourne)

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H. A. Norris, Architect *F. E. Shillabeer and Sons, Contractors*

Nicholas Building, Swanston Street and Flinders Lane, Melbourne

Wunderlich Architectural Terra Cotta, of a grey texture (sometimes called "Granitex"), toning to a distinct white when viewed from a distance, provides the "facing" to the entire facades of this massive building. The contract for the Terra Cotta was finalised on the 6th October, 1925, and within twelve months of this date, the whole of the material was delivered to the site.

WUNDERLICH
ARCHITECTURAL TERRA COTTA

Bulletin T.C.3 — December, 1927

TERRA COTTA FACADES

Nicholas Building, Swanston St and Flinders Lane, Melbourne

STRUCTURES erected as commercial enterprises figure prominently in any review of modern Terra Cotta achievement, and Nicholas Building, Melbourne, is a worthy example of this type. Even as buildings are rated to-day, it is a massive construction, rising to the full height permitted by the city building regulations, and occupying frontages of 90 feet to Swanston Street and 120 feet to Flinders Lane.

Impressiveness of Terra Cotta.

Built at an approximate cost of half a million sterling, inclusive of the value of the site, it is designed to accommodate offices and shops, on the rentals of which its financial success depends. Accordingly, the particular aim of the architect at the outset was to incorporate important features making for a favourable impression on prospective tenants. As far as the exterior was concerned, his problem was solved when he chose a "facing" of Architectural Terra Cotta.

Widespread use in Notable Facades.

This "facing" medium has figured in the exterior treatment of the most notable building investments of modern times, prominent amongst them being the Woolworth Building, in New York, and the Wrigley Building, in Chicago. It is by no means a new material, as the history of architecture testifies; but its widespread use to-day for the entire facade of important buildings is a decidedly modern development, that may be attributed largely to the need for a material of distinctive appearance, adaptable to any form of construction, and able to withstand the tarnishing and disintegrating influences of a city atmosphere.

Permanent Colour and Finish.

The Wunderlich Architectural Terra Cotta, with which the Nicholas Building is faced, is of a grey texture when viewed closely, becoming whiter at a distance; the finish being frequently described as

(Continued on page 5)

H. A. Norris, Architect

F. E. Shillabeer and Sons, Contractors

Nicholas Building, Swanston Street and Flinders Lane, Melbourne

An important deciding factor in the adoption of Wunderlich Architectural Terra Cotta for the "facing" of Nicholas Building, was the permanent cleanliness of the material. Dust and soot have only a precarious lodgment on the glazed surfaces, so that both wind and rain tend to keep it clean. This newness of appearance is an undoubted asset to a business building, creating the impression that it is up to date.

(Continued from page 3)

"granitex." "If we had used cement surfacing," stated Mr. Harry A. Norris, the architect of Nicholas Building, in an interview with a representative of the Melbourne "Argus," "it would have looked very fine for a year or two, but afterwards the exterior would gradually have shown signs of irremediable griminess. The only remedy would have been to paint it, and to paint a building of this size would cost £1,000. We wanted a surface that could be washed down, and which, after washing, would look as new as the day it was erected. For this purpose, nothing equals the new Terra Cotta, and therefore, this was preferred to anything else."

Mr. Norris added that when the building needed washing, it could be done at a cost of £80, which, compared with painting at intervals of five years, would represent a periodical saving of £920.

Perfect Reflective Surface.

Of recent years, another factor has strengthened the claims of Architectural Terra Cotta as a facing medium for business premises. Flood-lighting, as a means to publicity, has been widely adopted, and tests have shown that maximum effects are obtained when the reflective surface is a glazed Terra Cotta. In the case of the Nicholas Building, now illuminated by flood-light, the architect's design is revealed in the resplendent glimmer of glazed Architectural Terra Cotta during the leisure hours of the evening, when people have ample opportunity to stop and admire it.

On behalf of my clients, and myself, I wish to compliment you on the supplying and service given in connection with the Terra Cotta facades you have supplied to Nicholas Building.

This work—the largest Terra Cotta contract undertaken in Australia—has been done entirely to my satisfaction, and the ornamental work has been turned out as I expected it.

I can confidently recommend to other architects, Wunderlich's Terra Cotta, and the good service offered by their skilled and attentive staff.

(A letter to us from Mr. Harry A. Norris, architect)

WUNDERLICH LIMITED, MANUFACTURERS OF ARCHITECTURAL TERRA COTTA

H. A. Norris, Architect

F. E. Shillabeer and Sons, Contractors

Nicholas Building, Swanston Street and Flinders Lane, Melbourne

Of all the standard mediums utilised for the "facing" of buildings, Architectural Terra Cotta provides the greatest scope for ornamentation, since reproduction of any number of repetitive details is both economical and speedy, once the original model has been completed. There is a freedom and vigour in modelled Terra Cotta that defies emulation in methodically hand-carved materials.

Facades of Wunderlich Architectural Terra Cotta

Since the establishment, in 1924, of the Wunderlich Works for the manufacture of Architectural Terra Cotta, the following contracts have been undertaken, for "facings" to entire exteriors of buildings, or portions of facades:—

Govt. Savings Bank of N.S.W., Martin Place, Sydney.
Ceramic Finish to Facade above base.
H. E. Ross and Rowe, Architects.

Temple Court, Melbourne.
Terra Cotta to Facade above base.
Barlow and Hawkins, Architects.

Royal Exchange Assurance Offices, Melbourne.
Terra Cotta to Facade above base.
Barlow and Hawkins, Architects.

Manufacturers' House, Sydney.
Terra Cotta to Facade above base.
S. H. Buchanan, Architect.

Sun Insurance Office, Sydney.
Terra Cotta to Ground and First Floors.
E. A. Scott and Green, Architects.

Bankers' and Traders' Building, Melbourne.
Terra Cotta Facade.
Peck and Kemter, Architects.

Bursary House, Hobart.
Terra Cotta Facade.
Glaskin and Ricards, Architects.

Metter's Building, Adelaide.
Terra Cotta Facade.
Woods, Bagot, Jory and Laybourne Smith, Architects.

William Street Post Office, Sydney.
Terra Cotta Facade.
Dept. of Works and Railways, Architects.

Nicholas Building, Melbourne.
Terra Cotta Facade.
H. A. Norris, Architect.

Berkeley Court, Bondi, Sydney.
Terra Cotta to Ground Floor.
E. P. Nunn, Architect.

Malloch House, Sydney.
Terra Cotta to Ground Floor.
H. E. Budden, Architect.

Dymock's Book Arcade, Sydney.
Terra Cotta Facade.
F. H. B. Wilton, Architect.

Mercantile Mutual Insurance Co. Ltd., Sydney.
Terra Cotta Facade.
Robertson and Marks, Architects.

Kurrajong House, Melbourne.
Terra Cotta to First Floor.
R. M. & M. H. King, Architects.

National Bank of Australasia Ltd., Geelong, Vic.
Terra Cotta to Portion of Facade.
H. W. & F. B. Tompkins, Architects.

Tattersall's Club, Adelaide.
Terra Cotta to Portion of Facade.
Garlick and Jackman, Architects.

Angel and Bullock, Adelaide.
Terra Cotta to Portion of Facade.
Garlick and Jackman, Architects.

Mark Foy's Emporium, Sydney.
Terra Cotta Cornices, Columns and Trim.
H. E. Ross and Rowe, Architects.

Claridge House, Adelaide.
Terra Cotta Trim.
Philip R. Claridge, Architect.

Christian Brothers' College, Strathfield.
Terra Cotta Columns, Arches, &c.
Hennessy, Hennessy, Keesing and Co., Architects.

R.C. Church, Clifton Gardens, Sydney.
Terra Cotta Columns, Trim, &c.
E. A. Scott and Green, Architects.

Pauline et Cie., Melbourne.
Terra Cotta to Shopfront.
F. L. and K. Klingender, Architects.

Duerdin and Sainsbury Ltd., Melbourne.
Terra Cotta Ornament and Trim.
Gawler and Drummond, Architects.

Public Works Office, Newcastle.
Terra Cotta Trim.
N.S.W. Government Architect.

His Majesty's Theatre, Melbourne.
Terra Cotta Piers.
Albion H. Walkley, Architect.

Children's Hospital, Melbourne.
Terra Cotta Trim.
Stephenson and Meldrum, Architects

Victoria Palace Ltd., Melbourne.
Terra Cotta Trim.
Alex. S. Eggleston. } Joint Architects.
Gawler and Drummond. }

Apart from "facing" treatments, we have produced innumerable decorative features and enrichments in Terra Cotta, including doorways, fountains, roundels, statuary, cartouches, window boxes, etc.

WUNDERLICH LIMITED, MANUFACTURERS OF ARCHITECTURAL TERRA COTTA

H. A. Norris, Architect *F. E. Shillabeer and Sons, Contractors*

Nicholas Building, Swanston Street and Flinders Lane, Melbourne

Although there are limitations to the sizes of blocks that can be produced economically in Architectural Terra Cotta, this illustration shows that scale is effectively maintained when the designer works with a knowledge of the material. Subject to the requirements of good design, sizes of blocks should be standardised, where possible, as this simplifies both manufacturing and setting.

H. A. Norris, Architect *F. E. Shillabeer and Sons, Contractors*

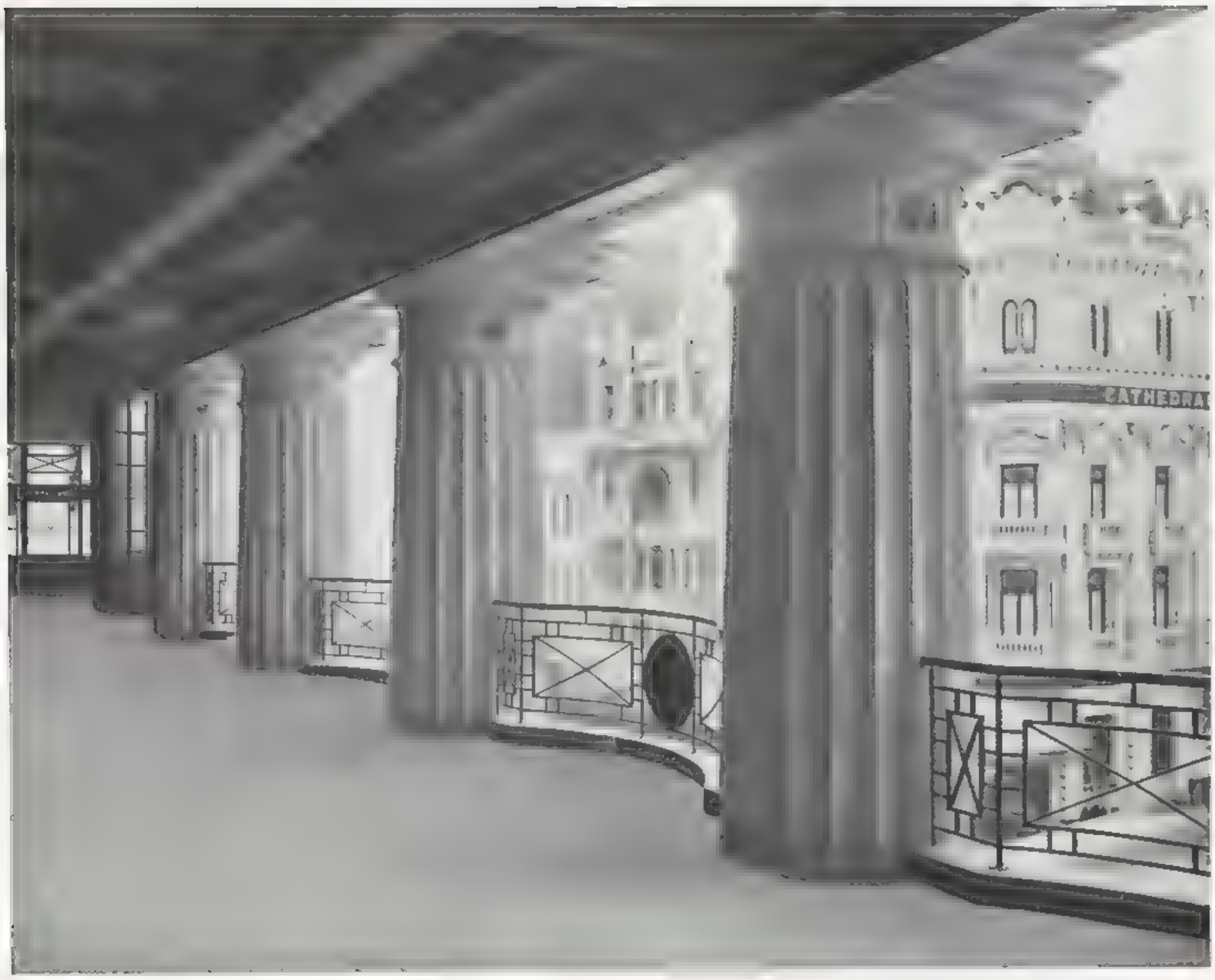
Nicholas Building, Swanston Street and Flinders Lane, Melbourne

Prior to the present century, Terra Cotta was usually employed for the decorative and moulded features of a facade, but modern towering structures of the type of Nicholas Building have created the need for plain ashlar blocks, as essential units in an exterior treatment entirely of imperishable Architectural Terra Cotta.

H. A. Norris, Architect — *F. E. Shillabeer and Sons, Contractors*

Nicholas Building, Swanston Street and Flinders Lane, Melbourne

Size is no obstacle to the effective rendering, in Terra Cotta, of architectural features. In fact, there are obvious advantages to be gained, in economy of production and ease of handling and setting, from the employment of Architectural Terra Cotta, where the design involves a series of columns or massive decorative details.



Contrast the economy of duplicating these columns, in Architectural Terra Cotta, with the expense of hand-carving each individual column.

Colours and Textures of Wunderlich Architectural Terra Cotta

AT the commencement of the present Terra Cotta era, colours were limited to the unglazed shades of burned clay—mainly greys, buffs, browns and reds. These are still available and are utilised freely, particularly in combination with another material, such as brick; but a preponderance of the Terra Cotta in modern facades has a ceramic finish of GLAZED colour, which embraces a palette extending from white, creams and ivories, to a virtually unlimited range of blues, greens, sienna, purple, yellows, lavender, and even scarlet and gold. The treatment of a facade, in Terra Cotta, may involve one colour only, or any combination of colours—even in the individual blocks.

Usually, for artistic reasons, the glaze is of a dull matt (smooth) finish, possessing a texture akin to egg shell. Alternatively, the glaze may be lustrous (glossy), like glass.

The range of Terra Cotta finishes is further enlarged by the development of "conglomerate" colours—a term given to combinations of colours such as ordinarily occur in natural formations. These can be produced in smooth surfaces or various rough textures.

As a comprehensive range of these colours and finishes has been produced successfully in Wunderlich Architectural Terra Cotta, architects in their designs can freely indulge their taste for colour, with full confidence that the result will justify their expectations.

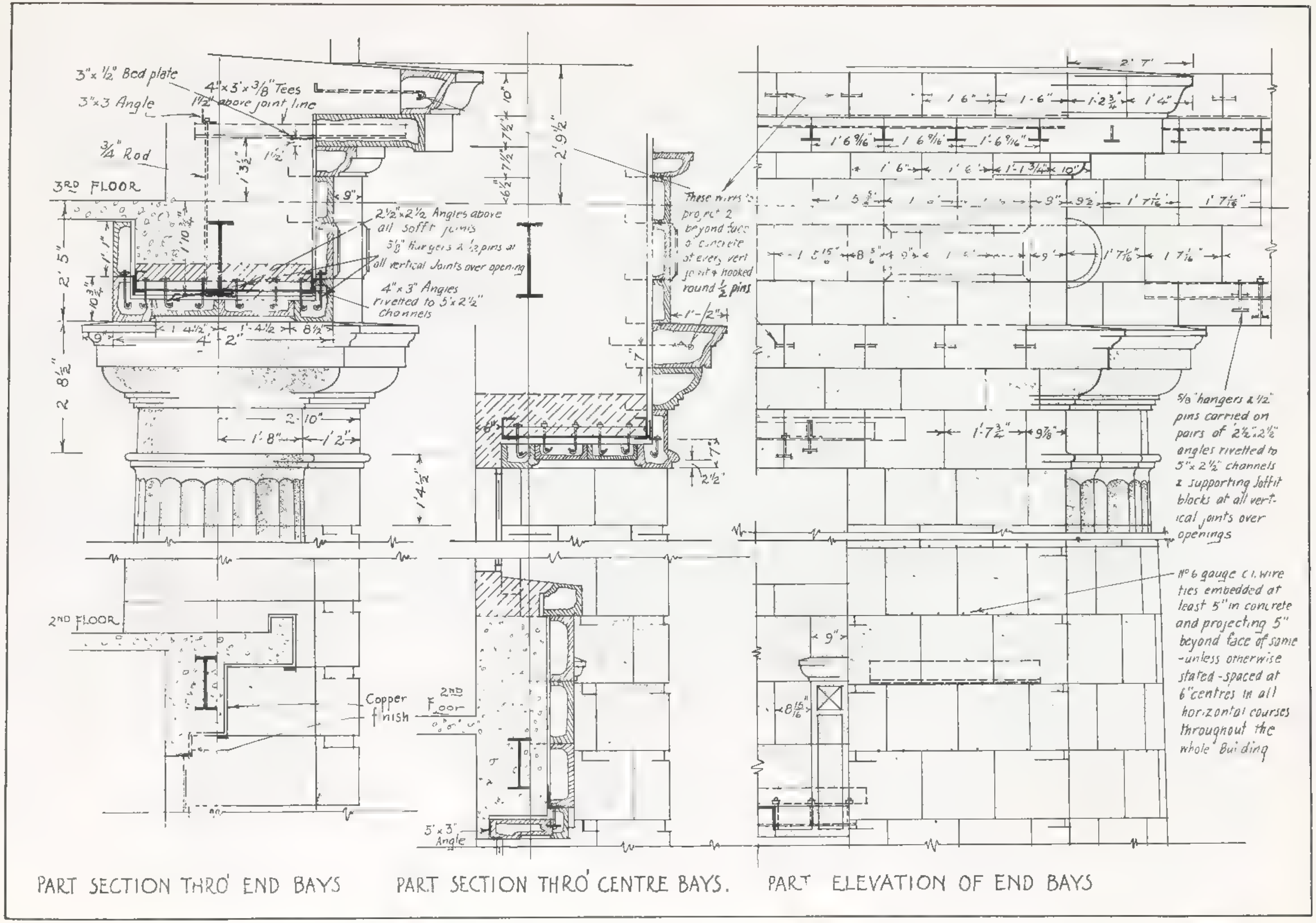


Plate 4

Nicholas Building, Melbourne; Fixing Details

Scale ⅜" = 1 foot.

Light in weight, being merely a shell, Wunderlich Architectural Terra Cotta is an ideal material, structurally, for projecting cornices, string courses, balconies, soffits, etc. The illustration explains the method of "setting" the frieze and cornice above columns, Nicholas Building

The Modern Utility of Architectural Terra Cotta

A SURVEY of the materials regarded as legitimate mediums for "facing" purposes, reveals the fact that Architectural Terra Cotta offers outstanding advantages rendering it singularly adaptable to modern construction.

Particularly is this apparent in the case of premises constructed of steel frame or reinforced concrete, where any applied "facing" material is an appendage serving an aesthetic purpose, and really unessential to the structural completeness of the building. Under these circumstances, the relative lightness of Terra Cotta becomes an important recommendation. Each block is merely a shell, about one inch in thickness, and less than half the weight of solid stone or granite of similar size.

This advantage is further emphasised in the hoisting and handling of the material, since even the largest details in a Terra Cotta facade are built up of comparatively small hollow blocks, that travel conveniently in an elevator and can be carried by manual labour to their locations.

Frequently, where a modern building on an expensive site is erected strictly to an exacting time-schedule, particular benefit will accrue from the adoption of a Terra Cotta "facing," as the material can be manufactured in great volume, at short notice, and the setting can usually proceed simultaneously on various floor levels.

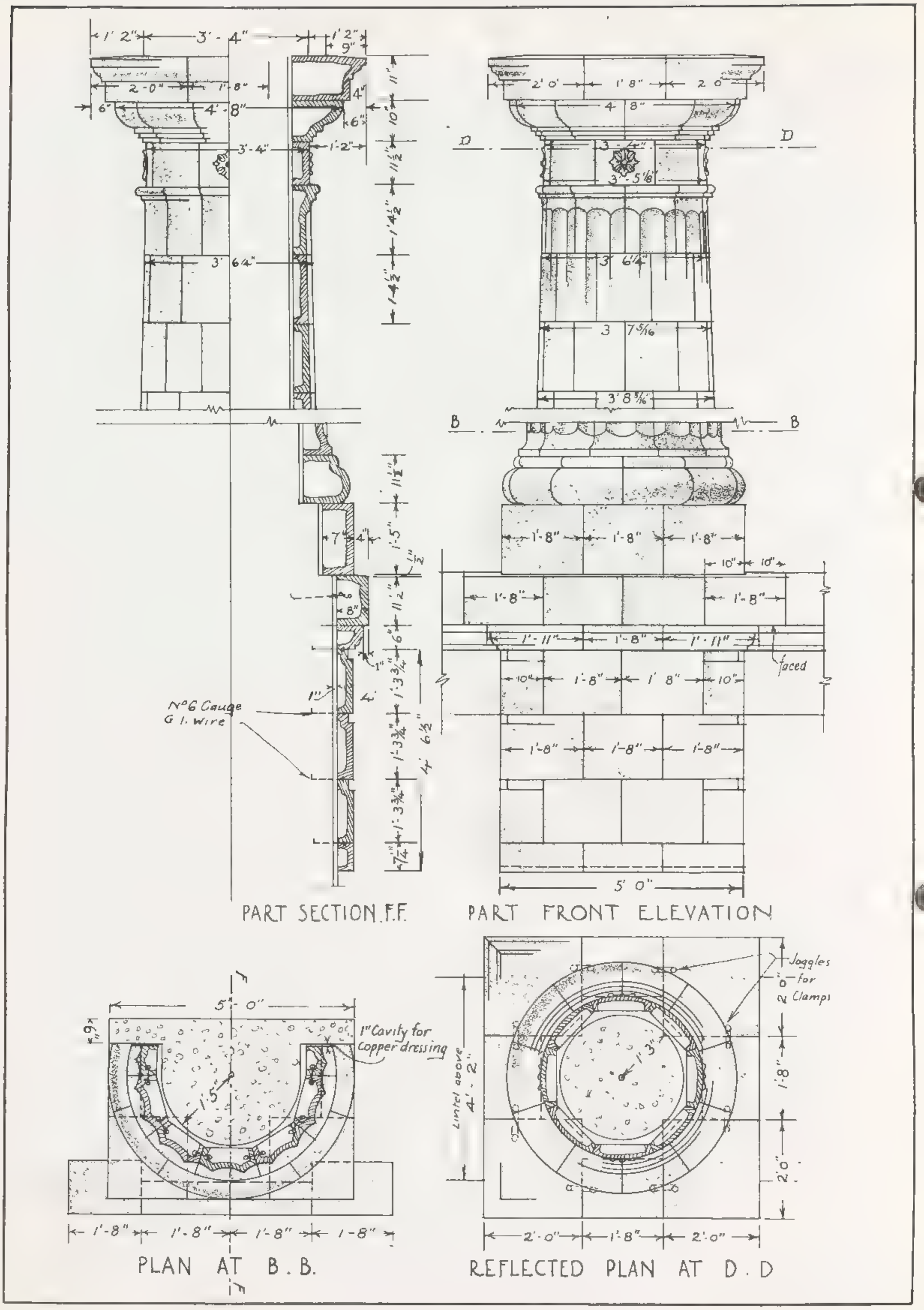
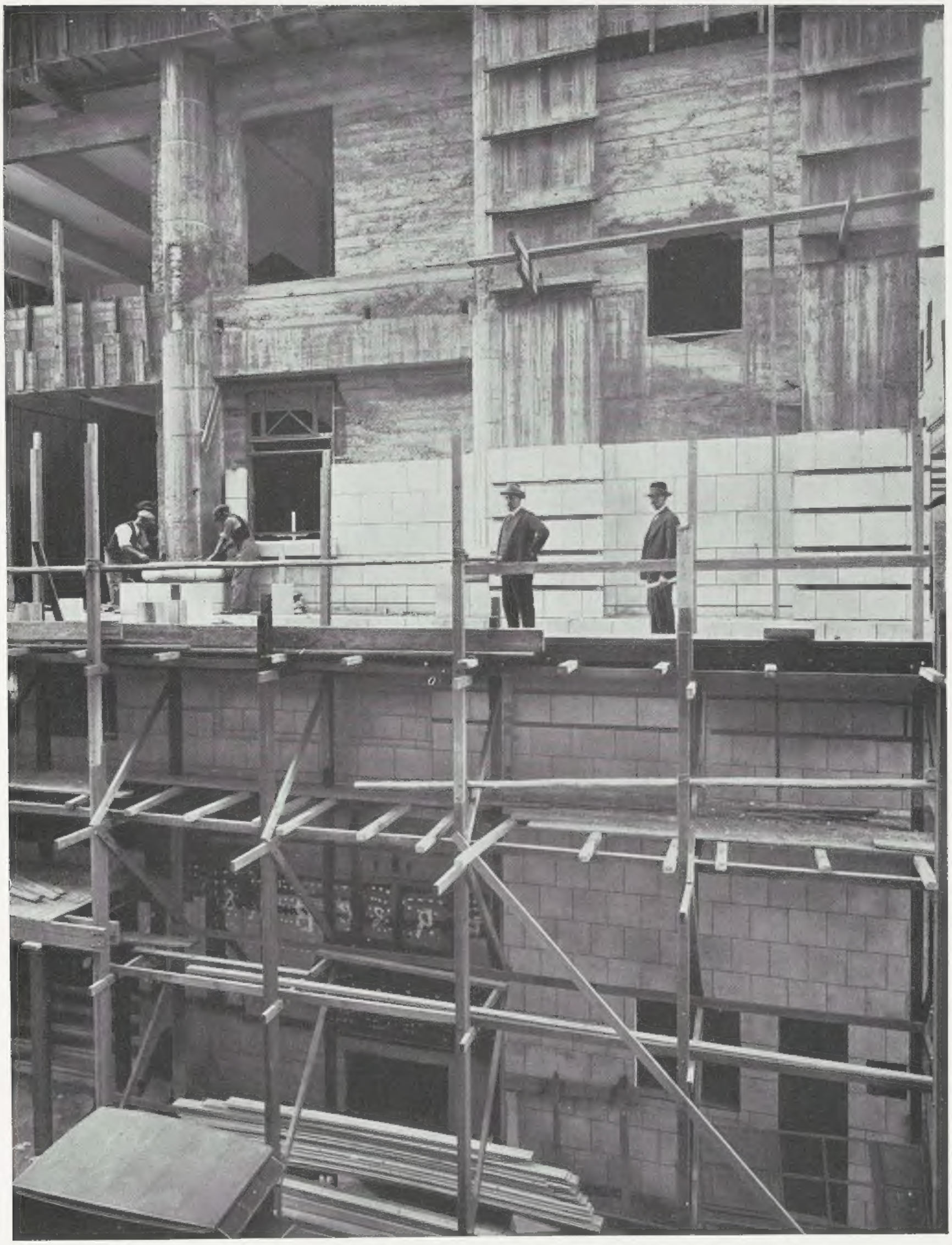


Plate 5.

Scale $\frac{3}{8}$" = 1 foot

Nicholas Building, Melbourne; Fixing Details



H. A. Norris, Architect *F. E. Shillabeer and Sons, Contractors*

Nicholas Building, Swanston Street and Flinders Lane, Melbourne

Wunderlich Architectural Terra Cotta is easily bonded into brickwork, or tied to concrete by means of wires and rods embedded in the backing, as described on page 14. Frequently, the Terra Cotta facing of a tall structure is supported at each floor level, or at suitable intervals, enabling the setting of the blocks to proceed simultaneously at various heights, should this become necessary.

To the left are shown the Wunderlich Works, erected at Sunshine (near Melbourne) in 1926, for the manufacture of Architectural Terra Cotta.

Contracts for facades of buildings in Victoria can be handled in their entirety at these Works.

Some of the first blocks of Terra Cotta, manufactured at Sunshine Works, are pictured in the illustration on the right.

Since the Works commenced operations, several contracts for "facings" and ornamental features of Melbourne buildings have been carried out successfully.

WITH works in operation at Sunshine, in addition to the parent Rosehill works, we now have the facilities for an enormous output of Architectural Terra Cotta, and can guarantee delivery to suit the most exacting schedule. To appreciate our manufacturing capacity to-day, it is only necessary to realise that, in the period of twelve months prior to the establishment of Sunshine works, our Rosehill plant produced, in part, the "facings" of seven structures, and completed in its entirety the Terra Cotta for Nicholas Building; maintaining, as well, regular deliveries of blocks for the "facing" of the huge premises, in Martin Place, Sydney, for the New South Wales Government Savings Bank.

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